

INFORMATION DISCLOSURE  
CITATION IN AN  
APPLICATION  
(PTO-1449)



ATTY. DOCKET NO. 113019.179US1	SERIAL NO. 09/252,828
APPLICANT Ke-Wen DONG et al.	
FILING DATE February 19, 1999	GROUP 1653

## U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE
Smm	2002/0028470 A1	03/07/02	Dong et al.			04/09/01
	2002/0172982 A1	11/21/02	Dong et al.			02/19/99
	2003/0148930	8/7/03	Chi et al.			8/1/02
	4,399,216	8/16/83	Axel et al.			2/25/80
	4,634,665	1/6/87	Axel et al.			8/11/83
	4,861,718	8/29/89	Hirata et al.			9/27/85
	4,889,803	12/26/89	Revel et al.			4/26/85
	4,960,704	10/2/90	Ingolia et al.			5/31/88
	5,034,322	7/23/91	Rogers et al.			4/5/89
	5,179,017	1/12/93	Axel et al.			6/18/91
	5,352,605	10/4/94	Fraley et al.			10/28/93
	5,618,698	04/08/97	Lin			06/06/95
	5,650,321	7/22/97	Levy			1/27/95
	5,703,057	12/30/97	Johnston et al.			04/07/95
	5,766,924	6/16/98	Levy			7/21/97
	5,817,793	10/6/98	Levy			4/8/94
	5,821,350	10/13/98	Huang et al.			11/1/95
	5,851,763	12/22/98	Heym et al.			5/9/95
	5,851,796	12/22/98	Schatz			6/7/95
	5,851,817	12/22/98	Hardy et al.			7/19/94
	5,888,981	3/30/99	Bujard et al.			6/7/95
	5,891,718	4/6/99	Hobart et al.			3/27/96
	5,922,927	7/13/99	Bujard et al.			7/21/97
	5,925,541	7/20/99	Goldstein et al.			9/11/96
	5,962,326	10/5/99	Shimada et al.			12/18/97
	5,968,773	10/19/99	Heddie et al.			11/14/97
	5,976,545	11/02/99	Harris et al.			06/07/95
	5,981,228	11/9/99	Harris et al.			6/7/95
↓	5,989,550	11/23/99	Harris et al.			6/7/95

EXAMINER	DATE CONSIDERED
Deanne M. Mayer	8/23/05

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SHEET 2 OF 9

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U.S. PATENT DOCUMENTS

6,001,599	12/14/99	Harris et al.			6/2/95
6,027,727	2/22/00	Harris et al.			11/9/93
6,132,952	10/17/00	Cohen et al.			6/1/98
6,264,953 B1	07/24/01	Dunbar			10/09/98

FOREIGN PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						Yes	No
Smm	90/15624	12/27/90	WO			X	
	93/14786	8/5/93	WO			X	
	94/10304	5/11/94	WO			X	
	94/22472	10/13/94	WO			X	
	95/27206	10/12/95	WO			X	
	96/05305	2/22/96	WO			X	
	96/06113	2/29/96	WO			X	
	98/37185	8/27/98	WO			X	
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	99/52544	10/21/99	WO			X	
	99/64626	12/16/99	WO			X	
	99/64627	12/16/99	WO			X	
	99/65520	12/23/99	WO			X	
	99/65928	12/23/99	WO			X	
	0488470	5/28/97	EP			X	

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

Smm	Harrison, R. G. May 25-27, 1960. "Proceedings of the Society for the Study of Fertility." <i>Annual Conference</i> . London.
	Hartmann, John F. et al. October 1972. "Early Contact Interactions Between Mammalian Gametes <i>In Vitro</i> : Evidence That the Vitellus Influences Adherence Between Sperm and Zona Pellucida." <i>Proc. Nat. Acad. Sci. USA</i> . Vol. 69, No. 10, pp. 2767-2769.
	O'Farrell, Patrick H. May 25, 1975. "High Resolution Two-Dimensional Electrophoresis of Proteins." <i>The Journal of Biological Chemistry</i> . Vol. 250, No. 10, pp. 4007-4021.

EXAMINER	DATE CONSIDERED
Suzanne M. Mayer	8/23/05

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FILING DATE February 19, 1999	GROUP 1653

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>Summ</i>	Russell, Lonnie et al. July 1979. "Morphologic Characteristics of the Chemically Induced Acrosome Reaction in Human Spermatozoa." <i>Fertility and Sterility</i> . Vol. 32, No. 1, pp. 87-92.
	Saling, Patricia M. et al. 1979. "An Ultrastructural Study of Epididymal Mouse Spermatozoa Binding to Zona Pellucidae in Vitro: Sequential Relationship to the Acrosome Reaction." <i>J. Exp. Zool.</i> Vol. 209, pp. 229-238.
	Hook, Ernest B. September 1981. "Rates of Chromosome Abnormalities at Different Maternal Ages." <i>Obstetrics and Gynecology</i> . Vol. 58, No. 3, pp. 282-285.
	Koehler, James K. 1981. "Surface Alterations During the Capacitation of Mammalian Spermatozoa." <i>American Journal of Primatology</i> . Vol. 1, pp. 131-141.
	Yanagimachi, R. 1981. "Mechanisms of fertilization in mammals", In Mastroianni L Jr and Biggers JD (eds): <i>Fertilization and Embryonic Development In Vitro</i> . New York, Plenum Press, pp 81-182.
	Yanagimachi, Ryuza et al. 1981. "Sperm Autoantigens and Fertilization: II. Effects of Anti-Guinea Pig Sperm Autoantibodies on Sperm-Ovum Interactions." <i>Biology of Reproduction</i> . Vol. 24, pp. 512-518.
	Ficsor, Gyula et al. April 1983. "Gelatin-Substrate Film Technique for Detection of Acrosin in Single Mammalian Sperm." <i>Fertility and Sterility</i> . Vol. 39, No. 4, pp. 548-552.
	Mack, S. et al. 1983. "Acrosomal Enzymes of Human Spermatozoa Before and After In Vitro Capacitation." <i>Biology of Reproduction</i> . Vol. 28, pp. 1032-1042.
	Hyne, R. V. et al. 1984. "Sodium Requirement for Capacitation and Membrane Fusion During the Guinea-Pig Sperm Acrosome Reaction." <i>J. Reprod. Fert.</i> Vol. 70, pp. 83-94.
	Ward, Cynthia R. and Bayard T. Storey. 1984. "Determination of the Time Course of Capacitation in Mouse Spermatozoa Using a Chlortetracycline Fluorescence Assay." <i>Developmental Biology</i> . Vol. 104, pp. 287-296.
	Bleil, Jeffrey D. and Paul M. Wassarman. April 1986. "Autoradiographic Visualization of the Mouse Egg's Sperm Receptor Bound to Sperm." <i>The Journal of Cell Biology</i> . Vol. 102, pp. 1363-1371.
	Menken, Jane et al. September 26, 1986. "Age and Infertility." <i>Science</i> . Vol. 233, pp. 1389-1394.
	Fournier-Delpech, Suzanne and Michel Courot. 1987. "Sperm - Zona Pellucida Binding Activity." <i>Oxford Reviews of Reproductive Biology</i> . Vol. 9, pp. 294-300.
	Lee, Michael A. et al. October 1987. "Capacitation and Acrosome Reactions in Human Spermatozoa Monitored by a Chlortetracycline Fluorescence Assay." <i>Fertility and Sterility</i> . Vol. 48, No. 4, pp. 649-658.
	Timmons, T. M. et al. 1987. "Use of Specific Monoclonal and Polyclonal Antibodies to Define Distinct Antigens of the Porcine Zona Pellucidae." <i>Biology of Reproduction</i> . Vol. 36, pp. 1275-1287.
	Bleil, Jeffrey D. and Paul M. Wassarman. September 1988. "Galactose at the Nonreducing Terminus of O-Linked Oligosaccharides of Mouse Egg Zona Pellucida Glycoprotein ZP3 Is Essential for the Glycoprotein's Sperm Receptor Activity." <i>Proc. Natl. Acad. Sci. USA</i> . Vol. 85, pp. 6778-6782.

EXAMINER

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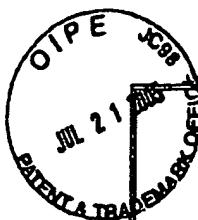
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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

Conover, JC and Gwatkis, RB. July 1988. "Fertilization of zona-drilled mouse oocytes treated with a monoclonal antibody to the zona glycoprotein, ZP3." <i>J. Exp. Zool.</i> Vol. 247, No. 1, pp. 113-8.
Shabanowitz, RB and O'Rand, MG. 1988. "Molecular changes in the human zona pellucida associated with fertilization and human sperm-zona interactions." <i>Ann. N.Y. Acad. Sci.</i> Vol. 541, pp. 621-32.
Cross, Nicholas L. et al. 1988. "Induction of Acrosome Reactions by the Human Zona Pellucida." <i>Biology of Reproduction.</i> Vol. 38, pp. 235-244.
Liu, De Yi et al. November 1988. "A Human Sperm-Zona Pellucida Binding Test Using Oocytes That Failed to Fertilize In Vitro." <i>Fertility and Sterility.</i> Vol. 50, No. 5, pp. 782-788.
Macek, Mary Beth and Barry D. Shur. 1988. "Protein-Carbohydrate Complementarity in Mammalian Gamete Recognition." <i>Gamete Research.</i> Vol. 20, pp. 93-109.
Kennedy, W.P. et al. May/June 1989. "A Simple, Clinical Assay to Evaluate the Acrosin Activity of Human Spermatozoa." <i>Journal of Andrology.</i> Vol. 10, No. 3, pp. 221-231.
Leyton, Lisette and Patricia Saling. June 1989. "Evidence That Aggregation of Mouse Sperm Receptors by ZP3 Triggers the Acrosome Reaction." <i>The Journal of Cell Biology.</i> Vol. 108, pp. 2163-2168.
Jones, R. 1990. "Identification and Functions of Mammalian Sperm-Egg Recognition Molecules During Fertilization." <i>J. Reprod. Fert., Suppl.</i> Vol. 42, pp. 89-105.
Von-Bernhardt, R. et al. Jan.-Feb. 1990. "Round-headed spermatozoa: a model to study the role of the acrosome in early events of gamete interaction." <i>Andrologia.</i> Vol. 22, No. 1, pp. 12-20.
Shabanowitz, RB. Aug. 1990. "Mouse antibodies to human zona pellucida: evidence that human ZP3 is strongly immunogenic and contains two distinct isomer chains." <i>Biol. Reprod.</i> Vol. 43, No. 2, pp. 260-70.
Kopf, G. S. 1990. "Zona Pellucida-Mediated Signal Transduction in Mammalian Spermatozoa." <i>J. Reprod. Fert., Suppl.</i> Vol. 42, pp. 33-49.
Topfer-Petersen E. et al. 1990. "Cell biology of acrosomal proteins." <i>Andrologia;</i> Vol. 22, No. 1, pp. 110-21.
Naz, RK et al. May 1991. "Role of membrane phosphotyrosine proteins in human spermatozoal function." <i>J. Cell. Sci.</i> Vol. 99, No. 1, pp. 157-65.
Koyama, K. et al. Nov. 1991. "Blocking of human sperm-zona interaction by monoclonal antibodies to a glycoprotein family (ZP4) of porcine zona pellucida." <i>Biol. Reprod.</i> Vol. 45, No. 5, pp. 727-35.
Yurewicz, EC et al. Oct. 1991. "Isolation, composition, and biological activity of sugar chains of porcine oocyte zona pellucida 5SK glycoproteins." <i>Mol. Reprod. Dev.</i> Vol. 30, No. 2, pp. 126-34.
Millar, SE et al. Dec. 1991. "Oocyte-specific factors bind a conserved upstream sequence required for mouse zona pellucida promoter activity." <i>Mol. Cell. Biol.</i> Vol. 11, No. 12, pp. 6197-204.
Keenan, JA et al. Jan. 1991. "Endocrine response in rabbits immunized with native versus deglycosylated porcine zona pellucida antigens." <i>Biol. Reprod.</i> Vol. 44, No. 1, pp. 150-6.
Naz, RK et al. May 1991. "Human spermatozoal FA-1 binds with ZP3 of porcine zona pellucida." <i>J. Reprod. Immunol.</i> Vol. 20, No. 1, pp. 43-58.

EXAMINER <i>Suzanne M. Mayer</i>	DATE CONSIDERED <i>8/23/05</i>
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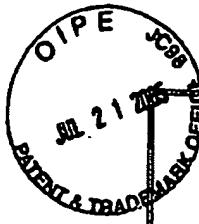
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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>Scrum</i>	Hasegawa, A. Feb. 1991. "Isolation of four major glycoprotein families (ZP1, ZP2, ZP3, ZP4) of porcine zona pellucida and characterization of antisera raised to each glycoprotein family." <i>Nippon Sanka Fujinka Gakki Zasshi</i> . Vol. 43, No. 2, pp. 221-6.
	Oehninger, Sergio et al. January 1991. "Nature of the Inhibitory Effect of Complex Saccharide Moieties on the Tight Binding of Human Spermatozoa to the Human Zona Pellucida." <i>Fertility and Sterility</i> . Vol. 55, No. 1, pp. 165-169.
	Schwoebel, Eric et al. April 15, 1991. "Isolation and Characterization of a Full-Length cDNA Encoding the 55-kDa Rabbit Zona Pellucida Protein." <i>The Journal of Biological Chemistry</i> . Vol. 266, No. 11, pp. 7214-7219.
	Oehninger, Sergio et al. May 1991. "Recurrent Failure of In Vitro Fertilization: Role of the Hemizona Assay in the Sequential Diagnosis of Specific Sperm-Oocyte Defects." <i>Am. J. Obstet. Gynecol.</i> Vol. 164, pp. 1210-1215.
	Aarons, David et al. 1991. "Acrosome Reaction Induced by Immunoaggregation of a Proteinase Inhibitor Bound to the Murine Sperm Head." <i>Molecular Reproduction and Development</i> . Vol. 30, pp. 258-264.
	Macek, Mary Beth et al. 1991. "Aggregation of $\beta$ -1, 4-Galactosyltransferase on Mouse Sperm Induces the Acrosome Reaction." <i>Developmental Biology</i> . Vol. 147, pp. 440-444.
	Mortillo, Steven and Paul M. Wassarman. 1991. "Differential Binding of Gold-Labeled Zona Pellucida Glycoproteins mZP2 and mZP3 to Mouse Sperm Membrane Compartments." <i>Development</i> . Vol. 113, pp. 141-149.
	Wassarman, Paul M. and Steven Mortillo. 1991. "Structure of the Mouse Egg Extracellular Coat, the Zona Pellucida." <i>International Review of Cytology</i> . Vol. 130, pp. 85-87.
	Dean, Jurrien. April 1992. "Biology of Mammalian Fertilization: Role of the Zona Pellucida." <i>The Journal of Clinical Investigation, Inc.</i> Vol. 89, pp. 1055-1059.
	Oehninger, Sergio. 1992. "Diagnostic Significance of Sperm-Zona Pellucida." <i>Reproductive Medicine Review</i> . Vol. 1, pp. 57-81.
	Prasher, Douglas C. et al. 1992. "Primary Structure of the <i>Aequorea Victoria</i> Green-Fluorescent Protein." <i>Gene</i> . Vol. 111, pp. 229-233.
	Rosiere, Thomas K. and Paul M. Wassarman. 1992. "Identification of a Region of Mouse Zona Pellucida Glycoprotein mZP3 That Possesses Sperm Receptor Activity." <i>Developmental Biology</i> . Vol. 154, pp. 309-317.
	Salzberger, Z. et al. 1992. "Loss of Acid Phosphatase from Rat Spermatozoa as a Method for Assessing the Acrosome Reaction." <i>Andrologia</i> . Vol. 24, pp. 155-159.
	Rhim, SH et al. Jan. 1992. "Autoimmune disease of the ovary induced by a ZP3 peptide from the mouse zona pellucida." <i>J. Clin. Invest.</i> Vol. 89, No. 1, pp. 28-35.
	Yurewicz, EC et al. Oct. 1992. "Porcine oocyte zona pellucida M(r) 55,000 glycoproteins: identification of O-glycosylated domains." <i>Mol. Reprod. Dev.</i> Vol. 33, No. 2, pp. 182-8.
	Paterson, M. et al. April 1992. "Analysis of the contraceptive potential of antibodies against native and deglycosylated porcine ZP3 in vivo and in vitro." <i>Biol. Reprod.</i> Vol. 46, No. 4, pp. 523-34.
↓	Tulsiani, DR et al. Jan. 1992. "Evidence for the presence of high-mannose/hybrid oligosaccharide chain(s) on the mouse ZP2 and ZP3." <i>Biol. Reprod.</i> Vol. 46, No. 1, pp. 93-100.

EXAMINER <i>Surine M. Mayer</i>	DATE CONSIDERED <i>8/23/05</i>
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<i>Scrum</i>	Bagavant, H. et al. Dec. 1993. "Block in porcine gamete interaction by polyclonal antibodies to a pig ZP3 beta fragment having partial sequence homology to human ZP3." <i>J. Reprod. Immunol.</i> Vol. 25, No. 3, pp. 277-83.
	Toner, James P. and Jill Taylor Flood. June 1993. "Fertility After the Age of 40." <i>Perimenopausal Health Care.</i> Vol. 20, No. 2, pp. 261-272.
	Patankar, Manish S. et al. October 15, 1993. "A Revised Structure for Fucoidan May Explain Some of Its Biological Activities." <i>The Journal of Biological Chemistry.</i> Vol. 268, No. 29, pp. 21770-21776.
	Oehninger, Sergio et al. 1993. "The Specificity of Human Spermatozoa/Zona Pellucida Interaction Under Hemizona Assay Conditions." <i>Molecular Reproduction and Development.</i> Vol. 35, pp. 57-61.
	Yurewicz, Edward C. et al. 1993. "Porcine Zona Pellucida ZP3 $\alpha$ Glycoprotein Mediates Binding of the Biotin-Labeled M, 55,000 Family (ZP3) to Boar Sperm Membrane Vesicles." <i>Molecular Reproduction and Development.</i> Vol. 36, pp. 382-389.
	Yurewicz, EC et al. May 1993. "Generation and characterization of site-directed antisera against an amino-terminal segment of a 55 kDa sperm adhesive glycoprotein from zona pellucida of pig oocytes." <i>J. Reprod. Fertil.</i> Vol. 98, No. 1, pp. 147-52.
	Yurewicz, EC et al. Aug. 1993. "Nucleotide sequence of cDNA encoding ZP3 alpha, a sperm-binding glycoprotein from zona pellucida of pig oocyte." <i>Biochim. Biophys. Acta.</i> Vol. 1174, No. 2, pp. 211-4.
	Van Duin, M. et al. 1993. "The human gene for zona pellucida glycoprotein ZP3 and a second polymorphic locus are located on chromosome 7." <i>Cytogenet. Cell. Genet.</i> Vol. 63, No. 2, pp. 111-3.
	Chalfie, M. et al. Feb. 1994. "Green fluorescent protein as a marker for gene expression." <i>Science.</i> Vol. 263, No. 5148, pp. 802-5.
	Wang, Shengxian and Tulle Hazelrigg. June 2, 1994. "Implications for bcd mRNA Localization from Spatial Distribution of exu Protein in <i>Drosophila</i> Oogenesis." <i>Nature.</i> Vol. 369, pp. 400-403.
	Arts, Eugene G. J. M. et al. November 1994. "A New Method to Detect Acrosome-Reacted Spermatozoa Using Biotinylated Soybean Trypsin Inhibitor." <i>Fertility and Sterility.</i> Vol. 62, No. 5, pp. 1044-1055.
	Bielfeld, Peter et al. December 1994. "Are Capacitation or Calcium Ion Influx Required for the Human Sperm Acrosome Reaction?" <i>Fertility and Sterility.</i> Vol. 62, No. 6, pp. 1255-1261.
	Flach, Jean et al. December 1994. "A Yeast RNA-Binding Protein Shuttles Between the Nucleus and the Cytoplasm." <i>Molecular and Cellular Biology.</i> Vol. 14, No. 12, pp. 8399-8407.
	Inouye, Satoshi and Frederick I. Tsuji. 1994. "Evidence for Redox Forms of the <i>Aequorea</i> Green Fluorescent Protein." <i>FEBS Letters.</i> Vol. 351, pp. 211-214.
	Naz, RK et al. Dec. 1994. "Molecular identities of human sperm proteins that bind human zona pellucida: nature of sperm-zona interaction, tyrosine kinase activity, and the involvement of FA-1." <i>Mol. Reprod. Dev.</i> Vol. 39, No. 4, pp. 397-408.
	Bagavant, H. et al. Sep. 1994. "Antifertility effects of porcine zona pellucida-3 immunization using permissible adjuvants in female bonnet monkeys (Macaca radiata): reversibility, effect on follicular development and hormonal profiles." <i>J. Reprod. Fert.</i> Vol. 102, No. 1, pp. 17-25.
	Hinsch, KD et al. Oct. 1994. "Anti-ZP3 antibodies binding to the human zona pellucida: effect of oocyte-storage conditions." <i>Am. J. Reprod. Immunol.</i> Vol. 32, No. 3, pp. 146-51.
	Wydner, KS et al. Sep. 1994. "Use of an intron polymorphism to localize the tropoelastin gene to mouse chromosome 5 in a region of linkage conservation with human chromosome 7." <i>Genomics.</i> Vol. 23, No. 1, pp. 125-31.

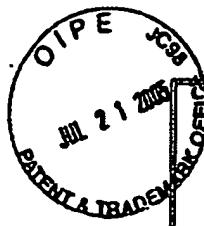
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GROUP  
1644 1653

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>Summ</i>	Cui, KH et al. Jan. 1994. "Sex determination of preimplantation embryos by human testis-determining gene amplification." <i>Lancet</i> . Vol. 343, No. 8889, pp. 79-82.
	Crozet, N. May 1994. "Acrosome reaction and fertilization." <i>Contracept. Fertil. Sex.</i> Vol. 22, No. 5, pp. 328-30.
	Marshall, John et al. February 1995. "The Jellyfish Green Fluorescent Protein: A New Tool for Studying Ion Channel Expression and Function." <i>Neuron</i> . Vol. 14, pp. 211-215.
	Henkel, Ralf et al. May/June 1995. "Acrosin Activity of Human Spermatozoa by Means of a Simple Gelatinolytic Technique: A Method Useful for IVP." <i>Journal of Andrology</i> . Vol. 16, No. 3, pp. 272-277.
	Epifano, O. et al. Nov. 1995. "Mouse ZP1 encodes a zona pellucida protein homologous to egg envelope proteins in mammals and fish." <i>J. Biol. Chem.</i> Vol. 270, No. 45, pp. 27254-8.
	Lou, YH et al. Oct. 1995. "Altered target organ. A mechanism of postrecovery resistance to murine autoimmune oophoritis." <i>J. Immunol.</i> Vol. 155, No. 7, pp. 3667-73.
	Aitken, RJ et al. May 1995. "Redox regulation of tyrosine phosphorylation in human spermatozoa and its role in the control of human sperm function." <i>J. Cell. Sci.</i> Vol. 108, No. 5, pp. 2017-25.
	Nata, K. et al. June 1995. "The structure of the Aplysia kurodai gene encoding ADP-ribosyl cyclase, a second-messenger enzyme." <i>Gene</i> . Vol. 158, No. 2, pp. 213-8.
	Perry, Raquel L. et al. July 1995. "A Time Course Study of Capacitation and the Acrosome Reaction in Human Spermatozoa Using a Revised Chlorotetracycline Pattern Classification." <i>Fertility and Sterility</i> . Vol. 64, No. 1, pp. 150-159.
	Delli, Anne et al. October 13, 1995. "Structural Analysis of the Oligosaccharides Derived from Glycodelin, a Human Glycoprotein with Potent Immunosuppressive and Contraceptive Activities." <i>The Journal of Biological Chemistry</i> . Vol. 270, No. 41, pp. 24116-24126.
	Kolluri, SK et al. 1995. "Nucleotide sequence of cDNA encoding bonnet monkey ( <i>Macaca radiata</i> ) zona pellucida glycoprotein-ZP3." <i>Reprod. Fert. Dev.</i> Vol. 7, No. 5, pp. 1209-12.
	MacKenna, A. 1995. "Contribution of the Male Factor to Unexplained Infertility: A Review." <i>International Journal of Andrology</i> . Vol. 18, Suppl. 1, pp. 58-61.
	Stearns, Tim. 1995. "The Green Revolution: Green Fluorescent Protein Allows Gene Expression and Protein Localization to be Observed in Living Cells." <i>Current Biology</i> . Vol. 5, No. 3, pp. 262-264.
	Wassarman, Paul M. and Eveline S. Litscher. 1995. "Sperm-Egg Recognition Mechanisms in Mammals." <i>Current Topics in Development Biology</i> . Vol. 30, pp. 1-19.
	Cheng, Feng-Pang et al. November/December 1996. "Use of Peanut Agglutinin to Assess the Acrosomal Status and the Zona Pellucida-Induced Acrosome Reaction in Stallion Spermatozoa." <i>Journal of Andrology</i> . Vol. 17, No. 6, pp. 674-682.
	Morris, Howard R. et al. December 13, 1996. "Gender-Specific Glycosylation of Human Glycodelin Affects Its Contraceptive Activity." <i>The Journal of Biological Chemistry</i> . Vol. 271, No. 50, pp. 32159-32167.
	Barros, C. et al. 1996. "Early Steps of Sperm-Egg Interactions During Mammalian Fertilization." <i>Cell Biology International</i> . Vol. 20, No. 1, pp. 33-39.

EXAMINER

*Denise M. Mayer*

DATE CONSIDERED

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SHEET 8 OF 9

INFORMATION DISCLOSURE  
CITATION IN AN  
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(PTO-1449)

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APPLICANT  
Ke-Wen DONG et al.

FILING DATE  
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GROUP  
1647 1653

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

<i>Some</i>	Bruch, J et al. 1996. "Mapping of type I loci from human chromosome 7 reveals segments of conserved synteny on pig chromosomes 3, 9, and 18." <i>Cytogenet. Cell. Genet.</i> Vol. 73, No. 3, pp. 164-7.
	Liu, De Yi and H.W. Gordon Baker. 1996. "A Simple Method for Assessment of the Human Acrosome Reaction of Spermatozoa Bound to the Zona Pellucida: Lack of Relationship With Ionophore A23187-Induced Acrosome Reaction." <i>Human Reproduction.</i> Vol. 11, No. 3, pp. 551-557.
	Mortimer, David and Lynn Fraser. 1996. "Consensus Workshop on Advanced Diagnostic Andrology Techniques: ESHRE Andrology Special Interest Group." <i>Human Reproduction.</i> Vol. 11, No. 7, pp. 1463-1479.
	Oehninger, Sergio et al. March 1997. "Approaching the Next Millennium: How Should We Manage Andrology Diagnosis in the Intracytoplasmic Sperm Injection Era?" <i>Fertility and Sterility.</i> Vol. 67, No. 3, pp. 434-436.
	Oehninger, Sergio et al. June 1997. "Clinical Significance of Human Sperm-Zona Pellucida Binding." <i>Fertility and Sterility.</i> Vol. 67, No. 6, pp. 1121-1127.
	Carver-Ward, J. A. et al. 1997. "Genetics: Comparative Flow Cytometric Analysis of the Human Sperm Acrosome Reaction Using CD46 Antibody and Lectins." <i>Journal of Assisted Reproduction and Genetics.</i> Vol. 14, No. 2, pp. 111-119.
	Franken, D. R. et al. 1997. "Zona Pellucida Mediated Acrosome Reaction and Sperm Morphology." <i>Andrologia.</i> Vol. 29, pp. 311-317.
	Kohn, F. M. et al. 1997. "Detection of Human Sperm Acrosome Reaction: Comparison Between Methods Using Double Staining, <i>Pisum Sativum</i> Agglutinin, Concanavalin A and Transmission Electron Microscopy." <i>Human Reproduction.</i> Vol. 12, No. 4, pp. 714-721.
	Margalit, I. et al. 1997. "A Novel Method for Evaluating the Acrosomal Status of Mammalian Spermatozoa." <i>Archives of Andrology.</i> Vol. 38, pp. 87-99.
	Mortensen, Richard et al. 1997. "Selection of Transfected Mammalian Cells." <i>Current Protocols in Molecular Biology.</i> Pp. 9.5.1-9.5.6.
	Shalgi, R. and T. Raz. 1997. "The Role of Carbohydrate Residues in Mammalian Fertilization." <i>Histo Histopathol.</i> Vol. 12, pp. 813-822.
	Arkin, Shy. February 20, 1998. "Protein Glycosylation." <a href="http://www.bio.cam.ac.uk/~sa232/tex/MVSTIA_4_8_Shynode13.html">www.bio.cam.ac.uk/~sa232/tex/MVSTIA_4_8_Shynode13.html</a> . Printed February 4, 1999.
	Hansen, Jan. August 4, 1998. "NetOGlyc 2.0 Prediction Server: Center for Biological Sequence Analysis." <a href="http://www.cbs.dtu.dk/services/NetOGlyc/">www.cbs.dtu.dk/services/NetOGlyc/</a> . Printed February 4, 1999.
	Chuang, Alex T. and Stuart S. Howards. November 1998. "Male Infertility: Evaluation and Nonsurgical Therapy." <i>Office Management of Urologic Problems.</i> Vol. 25, No. 4, pp. 703-713.
	Greenhouse, Stephen et al. 1998. "Insights from Model Systems: Genetic Causes of Female Infertility: Targeted Mutagenesis in Mice." <i>Am. J. Hum. Genet.</i> Vol. 62, pp. 1282-1287.
	Hansen, Jan E. et al. 1998. "NetOglyc: Prediction of Mucin Type O-Glycosylation Sites Based on Sequence Context and Surface Accessibility." <i>Glycoconjugate Journal.</i> Vol. 15, pp. 115-130.

EXAMINER

*Diane M. Mayer*

DATE CONSIDERED

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1644 1653

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

↓	Henkel, R. et al. 1998. "Zona Pellucida as Physiological Trigger for the Induction of Acrosome Reaction." <i>Andrologia</i> . Vol. 30, pp. 275-280.
	Irvine, D. S. 1998. "Epidemiology and aetiology of male infertility." <i>Hum. Reprod.</i> Vol. 13, No. 1, pp. 33-44.
	Oehninger, S. et al. 1998. "Involvement of Selectin-Like Carbohydrate Binding Specificity in Human Gamete Interaction." <i>Andrologia</i> . Vol. 30, pp. 269-274.
	Jaiswal, B.S. et al. 1999. "Detection of Partial and Complete Acrosome Reaction in Human Spermatozoa: Which Inducers and Probes to Use?" <i>Molecular Human Reproduction</i> . Vol. 5, No. 3, pp. 214-219.
	Tsubamoto, H. et al. 1999. "Expression of recombinant human zona pellucida protein 2 and its binding capacity to spermatazoa." <i>Biol. Reprod.</i> Vol. 61, pp. 1649-54.
	Dean, Jurien. June 24, 2000. "Maternal Effects on Folliculogenesis, Fertilization and Early Development." <i>Program &amp; Abstracts: The Endocrine Society's 82<sup>nd</sup> Annual Meeting</i> . Oocyte Development Symposium Session.
	Latif, R. and P. Graves. 2000. "Techniques in Thyroidology: Fluorescent Probes: Looking Backward and Looking Forward." <i>Thyroid</i> . Vol. 10, No. 5.
	Patra, Ashok K. et al. 2000. "Refolding, Structural Transition and Spermatozoa-Binding of Recombinant Bonnet Monkey ( <i>Macaca Radiata</i> ) Zona Pellucida Glycoprotein-C Expressed in <i>Escherichia Coli</i> ." <i>Eur. J. Biochem.</i> Vol. 267, pp. 7075-7081.
	Dong, Ke Wen et al. 2001. "Characterization of the Biologic Activities of a Recombinant Human Zona Pellucida Protein 3 Expressed in Human Ovarian Teratocarcinoma (PA-1) Cells." <i>Am. J. Obstet. Gynecol.</i> Vol. 184, pp. 835-844.
	Pietrobon, Elisa O. et al. January/February 2001. "Detection of the Mouse Acrosome Reaction by Acid Phosphatase. Comparison With Chlortetracycline and Electron Microscopy." <i>Journal of Andrology</i> . Vol. 22, No. 1, pp. 96-103.
	Esterhuizen, A.D. et al. 2001. "Clinical Importance of Zona Pellucida-Induced Acrosome Reaction and Its Predictive Value for IVF." <i>Human Reproduction</i> . Vol. 16, No. 1, pp. 138-144.
	Zhao, Ming et al. May 2002. "Conserved Furin Cleavage Site Not Essential for Secretion and Integration of ZP3 into the Extracellular Egg Coat of Transgenic Mice." <i>Molecular and Cellular Biology</i> . Vol. 22, No. 9, pp. 3111-3120.
↓	March 21, 2005. Communication from European Patent Office regarding EP 02753427.0.

EXAMINER

Suzanne M. Mayer

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